



Fiber Pigtailed Photodiode Array (FPDA Series)

Rev 11B

Description

The Fiber Pigtailed Photodiode Array (FPDA) is a compact, multi-channel power-detecting device. It obviously simplifies module design and assembling process by pre-integrating several single power detectors in one package. It features with standard pins with 2.54 mm space that easily mount on PCB. It applies for channel power monitoring in DWDM system, in-line optical network switching protection monitoring (OLP), reconfigurable optical add/drop multiplexers (ROADM), and gain/attenuation monitoring in network's power detection.

Key Features

- High Integration
- Standard Pins
- High Responsivity

Applications

- DWDM System
- Optical Sensing System

Specifications

Parameter		Unit	Value	
Center Wavelength (λ_c)		nm	1310	1550
Operating Wavelength Range (λ_{op})		nm	$\lambda_c \pm 50$ nm	
Min. Responsivity		A/W	0.75	0.80
Max.Dark Current (@ 70 °C, - 5 V Bias)	0.5 GHz Bandwidth	nA	8	
	2.0 GHz Bandwidth	nA	2	
Max.Responsivity Temperature Dependence (λ_c)		dB	0.3	
Max.Responsivity Polarization Dependence		dB	0.1	
Min.Return Loss ¹		dB	40	
Max.Input Optical Power ²		mW	10	
Max.Reverse Voltage ²		V	20	
Max.Forward Current ²		mA	10	
Fiber Type		-	SMF-28 Fiber	
Operating Temperature		°C	0 to + 70	
Storage Temperature		°C	- 40 to + 85	

¹RL is 5 dB lower for each connector added.

²Guaranteed by Photodiode.

Pin Assignment

Electrical Pin Assignment

Pin#	Common Cathode Assignment	Common Anode Assignment
Pin1	Common Cathode for Ch 1 & 2	Common Anode for Ch 1 & 2
Pin2	Anode Ch. 1	Cathode Ch. 1
Pin3	Anode Ch. 2	Cathode Ch. 2
Pin4	Common Cathode for Ch. 3 & 4	Common Anode for Ch. 3 & 4
Pin5	Anode Ch. 3	Cathode Ch. 3
Pin6	Anode Ch. 4	Cathode Ch. 4
Pin7	Anode Ch. 5	Cathode Ch. 5
Pin8	Common Cathode for Ch. 5 & 6	Common Anode for Ch. 5 & 6

